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FILE 'HOME' ENTERED AT 16:17:26 ON 04 NOV 2008

=> fil req COST IN U.S. DOLLARS

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chain nodes : 7 8 9 10 11 12 ring nodes : 1 2 3 4 5 ring/chain nodes : chain bonds : 4-7 7-8 7-9 9-10 10-11 11-12 ring bonds : 3 - 41-2 1-6 2-3 4-5 5-6 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 4-7 5-6 7-8 7-9 9-10 11-12 exact bonds :

10 - 11isolated ring systems : containing 1 :

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:Atom 15:CLASS 16:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

T.1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:17:57 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -7788 TO ITERATE

25.7% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE** PROJECTED ITERATIONS: 150470 TO 161050 PROJECTED ANSWERS: 2 TO 322

L2 2 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 16:18:04 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 153368 TO ITERATE

100.0% PROCESSED 153368 ITERATIONS 252 ANSWERS

2 ANSWERS

SEARCH TIME: 00.00.02

252 SEA SSS FUL L1 L3

=> d scan

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

ΙN 1-0xa-3-azaspiro[4.5]decan-2-one, 3-[1-[2-[(2phenylethenyl)sulfonyl]acetyl]-4-piperidinyl]-

C23 H30 N2 O5 S MF

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Oxazolidinone, 4-phenyl-3-[1-[2-[(2-phenylethenyl)sulfonyl]acetyl]-4-piperidinyl]-

MF C24 H26 N2 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-0xazolidinone, 4-(2-methylpropyl)-3-[1-[2-(phenylsulfonyl)acetyl]-4-piperidinyl]-

MF C20 H28 N2 O5 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Piperidine, 1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-(2-imino-1-piperidinyl)-, mono(trifluoroacetate) (salt) (9CI)

MF C23 H28 C1 N3 O4 S . C2 H F3 O2

CM 1

Absolute stereochemistry.

CM 2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2(1H)-Pyrimidinone, 1-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]tetrahydro-

MF C22 H26 C1 N3 O4 S

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Piperazinone, 1-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-4-methyl-

MF C23 H28 C1 N3 O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3(2H)-Thiazoleacetic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-5-methyl-, (2Z)-

MF C24 H26 C1 N3 O5 S2

CI COM

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 4-Thiazolecarboxylic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-2,3-dihydro-3-methyl-, ethyl ester, (2Z)-

MF C25 H28 C1 N3 O5 S2

Double bond geometry as shown.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2naphthalenyl)sulfonyl]-2-hydroxy-2-methyl-1-oxopropyl]-4-piperidinyl]-1,2dihydro-5-methyl-

MF C25 H27 C1 N4 O5 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-5-[[[(1,1dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro-

MF C30 H39 C1 N4 O5 S Si

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Imidazo[1,2-a]pyridine-3-carboxamide,
 N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl] 5,6,7,8-tetrahydro-

MF C26 H29 C1 N4 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN β -Alanine, N-(1-oxobutyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester

MF C31 H36 C1 N5 O8 S

Absolute stereochemistry.

PAGE 1-A

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Carbamic acid, dimethyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (9CI)

MF C27 H30 C1 N5 O7 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(3S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-3-(methylamino)-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:2)
- MF C25 H28 C1 N5 O4 S . 2 C1 H

Absolute stereochemistry.

●2 HC1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, ethyl ester (9CI)

MF C27 H30 Cl N5 O6 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[4-[(6-chloro-2naphthalenyl)sulfonyl]-3-methyl-1-oxobutyl]-4-piperidinyl]-1,2-dihydro-5methyl-
- MF C26 H29 C1 N4 O4 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C24 H25 C1 N4 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C26 H29 C1 N4 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[ethyl](4-methyl-1H-imidazol-5-yl)methyl]amino]-1-piperidinyl]-

MF C25 H31 C1 N4 O3 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1H-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1oxopropyl]-4-piperidinyl]-

MF C22 H23 Cl N4 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[2-(2-hydroxyethyl)-1H-imidazol-1-yl]-1-piperidinyl]-

MF C23 H26 C1 N3 O4 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-methyl-1Himidazol-1-yl)-1-piperidinyl]-

MF C22 H24 C1 N3 O3 S

$$\begin{array}{c|c} & & & \\ &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 4-Oxazolidinecarboxylic acid, 2-oxo-3-[1-[2-(phenylsulfonyl)acetyl]-4-piperidinyl]-, ethyl ester

MF C19 H24 N2 O7 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Oxazolidinone, 5-methyl-3-[1-[2-[(2-phenylethenyl)sulfonyl]acetyl]-4-piperidinyl]-

MF C19 H24 N2 O5 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-0xazolidinone, 3-[1-[2-(phenylsulfonyl)acetyl]-4-piperidinyl]-

MF C16 H20 N2 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Oxazolidinone, 4-phenyl-3-[1-[2-(phenylsulfonyl)acetyl]-4-piperidinyl]-

MF C22 H24 N2 O5 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-(2-imino[1,4'-bipiperidin]-1'-yl)-, (2S)-

MF C23 H28 C1 N3 O4 S

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Piperidine, 1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1oxopropyl]-4-(tetrahydro-4-methyl-2-oxo-1(2H)-pyrimidinyl)- (9CI)

MF C23 H28 C1 N3 O5 S

Absolute stereochemistry.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2(1H)-Pyrimidinone, 1-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]tetrahydro-

MF C22 H26 C1 N3 O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[3-(2-hydroxyethyl)-5-thiazolidinylidene]amino]-1-piperidinyl]-

MF C23 H28 C1 N3 O4 S2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C23 H26 C1 N3 O4 S2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-(3,4,6,7,8,9-\text{hexahydropyrido}[4',3':4,5]\,\text{imidazo}[1,2-a]\,\text{pyridin}-2(1\text{H})-\text{yl})-1-\text{piperidinyl}]-$
- MF C28 H33 C1 N4 O3 S
- CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 1H-Indole-1-carboxylic acid, 5-chloro-2-[[3-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-3-oxopropyl]sulfonyl]-, 1,1-dimethylethyl ester
- MF C27 H32 C1 N5 O6 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN β -Alanine, N-acetyl-N-propyl-,

[2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester

MF C32 H38 C1 N5 O8 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN Pentanoic acid, 5-(benzoylamino)-,
 [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4 piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester
 MF C36 H38 C1 N5 O8 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-5[(dimethylamino)methyl]-1,2-dihydro-
- MF C26 H30 C1 N5 O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN Carbamic acid, [(2S)-2-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-3-[4-(5-

 $\label{eq:methyl-3-oxo-1H-imidazo} $$ $$ methyl-3-oxo-1H-imidazo[1,5-c]$ imidazol-2(3H)-yl)-1-piperidinyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) $$ $$ C30 H36 Cl N5 O6 S$

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Urea, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-

MF C25 H27 C1 N6 O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C23 H27 C1 N4 O4 S

Double bond geometry as shown.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C24 H25 C1 N4 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5,7dimethyl-

MF C25 H27 C1 N4 O4 S

$$\begin{array}{c|c} Me & O & O & O \\ N & C - CH_2 - CH_2 - S \\ O & O \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Acetamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-[(4-methyl-1H-imidazol-5-yl)methyl]-

MF C25 H29 C1 N4 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 5H-Imidazo[1,5-a]imidazol-5-one, 6-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-6,7-dihydro-2-methyl-1-oxopropyl]-4-piperidinyl]-6,7-dihydro-2-methyl-1-oxopropyl]-1-oxopr

MF C24 H25 C1 N4 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-[2-(\text{hydroxymethyl})-1+-imidazol-1-yl]-1-piperidinyl]-$

MF C22 H24 C1 N3 O4 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[4-(1H-imidazol-1-yl)-1-piperidinyl]-

MF C21 H22 Br N3 O3 S

$$\begin{array}{c|c} & & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 4-Oxazolidinecarboxylic acid, 2-oxo-3-[1-[2-[(2-

phenylethenyl)sulfonyl]acetyl]-4-piperidinyl]-, phenylmethyl ester

MF C26 H28 N2 O7 S

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Oxazolidinone, 3-[1-[2-[(2-phenylethenyl)sulfonyl]acetyl]-4-piperidinyl]-

4-(phenylmethyl)-C25 H28 N2 O5 S

MF

$$\begin{array}{c|c} O & O \\ || & || \\ C - CH_2 - S - CH = CH - Ph \\ || & O \\ \end{array}$$

$$\begin{array}{c|c} O & O \\ || & || \\ O & ||$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2H-1,3-0xazin-2-one, tetrahydro-5,5-dimethyl-3-[1-[2-

(phenylsulfonyl)acetyl]-4-piperidinyl]-

MF C19 H26 N2 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2H-1, 4-Benzothiazin-3(4H)-one, 6-[(3-[1,4'-bipiperidin]-1'-yl-2-methyl-3-oxopropyl)sulfonyl]-2-methyl-

MF C23 H33 N3 O4 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2(1H)-Pyrimidinone, 1-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]tetrahydro-

MF C22 H26 C1 N3 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3(2H)-Pyridazinone, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]tetrahydro-

MF C22 H26 C1 N3 O5 S

Absolute stereochemistry.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Imidazolidinone, 1-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2hydroxy-1-oxopropyl]-4-piperidinyl]-

MF C21 H24 C1 N3 O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 5-Thiazolecarboxamide, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]amino]-N,4-dimethyl-

MF C24 H27 C1 N4 O4 S2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-[5-(1-hydroxyethyl)-3-methyl-2(3H)-thiazolylidene]amino]-1-piperidinyl]MF C24 H28 C1 N3 O4 S2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(3,4-
- dihydropyrido[4',3':4,5]imidazo[1,2-a]pyridin-2(1H)-yl)-1-piperidinyl]-
- MF C28 H29 Cl N4 O3 S
- CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-[[(2-\text{ethyl}-4-\text{methyl}-1H-\text{imidazol}-5-yl)\,\text{methyl}]\,\text{amino}]-1-\text{piperidinyl}]-$
- MF C25 H31 C1 N4 O3 S

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN β -Alanine, N-methyl-N-(1-oxohexyl)-,

[2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester

MF C34 H42 Cl N5 O8 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN Butanoic acid, 4-(acetylamino)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester
- MF C30 H34 C1 N5 O8 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

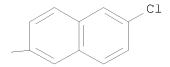
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- MF C27 H30 C1 N5 O7 S

Absolute stereochemistry.

PAGE 1-A



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxo-2-(2-oxo-3-oxazolidinyl)propyl]-4-piperidinyl]-1,2-dihydro-5-methyl-

MF C27 H28 Cl N5 O6 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 252 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Urea, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-N'-ethyl-

MF C27 H31 C1 N6 O5 S

Absolute stereochemistry.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
180.20 180.41

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:20:31 ON 04 NOV 2008
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FILE COVERS 1907 - 4 Nov 2008 VOL 149 ISS 19 FILE LAST UPDATED: 3 Nov 2008 (20081103/ED)

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L1 STRUCTURE UPLOADED

L2 2 S L1

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=> s 1317 L3 L4=> s 14 and (pry<2004)4260092 PRY<2004 12 L4 AND (PRY<2004) => d 1-12 ibib abs hitstr ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:251311 CAPLUS DOCUMENT NUMBER: 148:308364 Preparation of pyrazolopyrimidines as cyclin-dependent TITLE: kinase inhibitors Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.; INVENTOR(S): Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Mallams, Alan; Alvarez, Carmen S.; Keertikar, Kartik M.; Rivera, Jocelyn; Chan, Tin-Yau; Madison, Vincent S.; Fischmann, Thierry O.; Dillard, Lawrence W.; Tran, Vinh D.; He, Zhenmin; James, Ray Anthony; Park, Haengsoon; Paradkar, Vidyadhar M.; Hobbs, Douglas Walsh; Kirschmeier, Paul; Bannerji, Rajat Shering Corporation and Pharmacopeia, Inc., USA PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 387 pp., Cont.-in-part of U.S. SOURCE: Ser. No. 396,079. CODEN: USXXCO DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 10 PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. -----____ _____ _____ A1 20080228 US 2007-788847 20070420 <--US 20080050384 20061220 CN 2006-10101322 CN 1880317 Α 20030903 <--B2 20070109 US 7161003 US 2003-654546 20030903 <--A1 A1 US 20070037824 20070215 US 20040209878 20041021 US 2004-776988 20040211 <--US 7119200 В2 20061010 ZA 2005001855 А 20060329 ZA 2005-1855 20060117 <--US 20070054925 A1 20070308 US 2006-396079 20060331 <--A1 20081030 WO 2008-US4907 WO 2008130570 20080416 AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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OTHER SOURCE(S): GT

MARPAT 148:308364

Ι

AΒ The title compds. [I; R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020 μM and 0.029 μM against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical compns. comprising the compound I alone or in combination with other therapeutic agents are claimed. ΙT 677789-58-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors) 677789-58-1 CAPLUS RN

1-Propanone, 1-[4-[[3-bromo-5-(2-chlorophenyl)pyrazolo[1,5-a]pyrimidin-7-CN yl]amino]-1-piperidinyl]-3-(phenylsulfonyl)- (CA INDEX NAME)

L5 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1395785 CAPLUS

DOCUMENT NUMBER: 148:55084

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent

kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.;

Labroli, Marc; Keertikar, Kartik M.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 497pp., Cont.-in-part of U.S.

Ser. No. 710,644.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

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OTHER SOURCE(S): MARPAT 148:55084

GΙ

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The title compds. [I; R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020 μM and 0.029 μM against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I, alone or in combination with other therapeutic agent, is claimed.

IT 677789-58-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors) RN 677789-58-1 CAPLUS

CN 1-Propanone, 1-[4-[[3-bromo-5-(2-chlorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]-1-piperidinyl]-3-(phenylsulfonyl)- (CA INDEX NAME)

L5 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:579598 CAPLUS

DOCUMENT NUMBER: 145:62916

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent

kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.;

Labroli, Marc; Keertikar, Kartik M.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 1068 pp., Cont.-in-part of U.S.

Ser. No. 776,988.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 145:62916 GI

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AB The title compds. [I; R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020 μM and 0.029 μM against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I is claimed. IT 677789-58-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

CN

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors) RN $\,$ 677789-58-1 CAPLUS

1-Propanone, 1-[4-[[3-bromo-5-(2-chlorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]-1-piperidinyl]-3-(phenylsulfonyl)- (CA INDEX NAME)

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:300422 CAPLUS

DOCUMENT NUMBER: 142:373822

TITLE: Preparation of thiazoline derivatives as FXa

inhibitors

INVENTOR(S): Kubo, Keiji; Kuroita, Takanobu; Kawamura, Masaki;

Sakamoto, Hiroki

PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan

SOURCE: PCT Int. Appl., 192 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

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JP 2003-341430 A 20030930 <-WO 2004-JP14685 W 20040929

OTHER SOURCE(S): MARPAT 142:373822

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [R = (un) substituted cyclic hydrocarbon group, (un) substituted heterocyclic group; X = bond, (un) substituted divalent chain hydrocarbon group; X' = bond, NR5; R5 = H, (un)substituted hydrocarbon group, etc.; Y = (un)substituted divalent hydrocarbon group; Y' = bond, carbonyl; ring A = (un)substituted nitrogenous heterocycle; Z1, Z3 = bond, (un) substituted divalent chain hydrocarbon group; Z2 = bond, NR6; R6 = H, (un) substituted hydrocarbon group, etc.; a = 0-2; ring B = II, etc.; R2 = H, halo, etc.; R3 = H, (un)substituted hydrocarbon group, etc.; R4 = (un)substituted hydrocarbon group; further details on R2, R3, R4 were provided.] were prepared For example, reaction of 1-(3-((6-chloro-2-naphthyl)sulfonyl)propionyl)piperazine, e.g., prepared from 1-piperazinecarboxylic acid tert-Bu ester, with 4-chloromethyl-1,3-thiazole-2-amine·2HCl followed by treatment with iodomethane afforded compound III·2HCl. In FXa (blood coagulation factor Xa) inhibition assays, the IC50 value of compound III·2HCl was 22 nM. Compds. I are claimed useful for the treatment of myocardial infarction, obstructive arteriosclerosis, etc. Formulations are given. ΙT 849544-76-9P 849545-22-8P 849545-23-9P 849545-24-0P 849545-25-1P 849545-26-2P

IT 849544-76-9P 849545-22-8P 849545-23-9P 849545-24-0P 849545-25-1P 849545-26-2P 849545-27-3P 849545-28-4P 849545-29-5P 849545-30-8P 849545-31-9P 849545-32-0P 849545-33-1P 849545-45-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiazoline derivs. as FXa inhibitors for treatment of myocardial infarction, obstructive arteriosclerosis, etc.)

RN 849544-76-9 CAPLUS

CN 6H-Pyrrolo[3,4-d]thiazol-6-one, 5-[1-[3-[(6-chloro-2-naphthaleny1)sulfony1]-1-oxopropy1]-4-piperidiny1]-2,3,4,5-tetrahydro-3-methyl-2-(methylimino)-, (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-22-8 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-(3-methyl-2(3H)-thiazolylidene)amino]-1-piperidinyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-23-9 CAPLUS

CN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-[(Z)-(3,4-\text{dimethyl}-2(3H)-\text{thiazolylidene})\,\text{amino}]-1-\text{piperidinyl}]- (CA INDEX NAME)$

Double bond geometry as shown.

RN 849545-24-0 CAPLUS

CN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-[(Z)-(3,5-\text{dimethyl}-2(3H)-\text{thiazolylidene})\,\text{amino}]-1-\text{piperidinyl}]- (CA INDEX NAME)$

Double bond geometry as shown.

RN 849545-25-1 CAPLUS

CN 3(2H)-Thiazoleacetamide, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-, (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-26-2 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-[3-(2-hydroxyethyl)-2(3H)-thiazolylidene]amino]-1-piperidinyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-27-3 CAPLUS

CN 1-Propanone, $3-[(6-\text{chloro}-2-\text{naphthalenyl})\,\text{sulfonyl}]-1-[4-[(Z)-[3-(2-\text{methoxyethyl})-2(3H)-\text{thiazolylidene}]\,\text{amino}]-1-\text{piperidinyl}]- (CA INDEX NAME)$

Double bond geometry as shown.

RN 849545-28-4 CAPLUS

CN 3(2H)-Thiazoleacetic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-5-methyl-, hydrochloride (1:1), (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

● HCl

RN 849545-29-5 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-[5-(1-hydroxyethyl)-3-methyl-2(3H)-thiazolylidene]amino]-1-piperidinyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-30-8 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-[5-(hydroxymethyl)-3-methyl-2(3H)-thiazolylidene]amino]-1-piperidinyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-31-9 CAPLUS

CN 4-Thiazolecarboxylic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[(6-chloro-2-naphthalenyl)sul

oxopropyl]-4-piperidinyl]imino]-2,3-dihydro-3-methyl-, ethyl ester, (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-32-0 CAPLUS

CN 5-Thiazolecarboxamide, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-2,3-dihydro-N,3,4-trimethyl-, (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-33-1 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(Z)-[4-(hydroxymethyl)-3-methyl-2(3H)-thiazolylidene]amino]-1-piperidinyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 849545-45-5 CAPLUS

CN 3H-Thiazolo[3,4-a]pyrazin-8(5H)-one,
7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4piperidinyl]tetrahydro-3-(methylimino)-, (3Z)- (CA INDEX NAME)

Double bond geometry as shown.

ΙT 849548-21-6

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of thiazoline derivs. as FXa inhibitors for treatment of myocardial infarction, obstructive arteriosclerosis, etc.)

RN

849548-21-6 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[3-(2-CN hydroxyethyl)-5-thiazolidinylidenelaminol-1-piperidinyll- (CA INDEX NAME)

849546-68-5P 849546-74-3P 849546-79-8P ΙT

849546-82-3P 849547-00-8P 849547-04-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiazoline derivs. as FXa inhibitors for treatment of myocardial infarction, obstructive arteriosclerosis, etc.)

RN 849546-68-5 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-thiazolylamino)-1-piperidinyl]- (CA INDEX NAME)

RN

849546-74-3 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(4-methyl-2thiazolyl)amino]-1-piperidinyl]- (CA INDEX NAME)

RN 849546-79-8 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(5-methyl-2-thiazolyl)amino]-1-piperidinyl]- (CA INDEX NAME)

RN 849546-82-3 CAPLUS

CN 3(2H)-Thiazoleacetic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]imino]-5-methyl-, 1,1-dimethylethyl ester, (2Z)-(CA INDEX NAME)

Double bond geometry as shown.

RN 849547-00-8 CAPLUS

CN 4-Thiazolecarboxylic acid, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]amino]-, ethyl ester (CA INDEX NAME)

RN 849547-04-2 CAPLUS

CN 5-Thiazolecarboxamide, 2-[[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]amino]-N,4-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:980998 CAPLUS

DOCUMENT NUMBER: 141:379942

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent

kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Mallams,

Alan; Alvarez, Carmen S.; Keertikar, Kartik M.; Rivera, Jocelyn; Chan, Tin-Yau; Madison, Vincent; Fischmann, Thierry O.; Dillard, Lawrence W.; Tran, Vinh D.; He, Zhen Min; James, Ray Anthony; Park, Haengsoon; Paradkar, Vidyadhar M.; Hobbs, Douglas

Walsh

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.

SOURCE: U.S. Pat. Appl. Publ., 1044 pp., Cont.-in-part of U.S.

Ser. No. 654,546.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
US 20040209878 US 20040209878 PRIORITY APPLN. INFO.:	A1 A1	20041021 20041021	US 2004-776988 US 2004-776988 US 2002-408027P US 2002-421959P US 2003-654546 US 2004-776988	P A2	20040211 < 20040211 < 20020904 < 20021029 < 20030903 < 20040211		

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AB The title compds. [I R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020 $\mu\rm M$ and 0.029 $\mu\rm M$ against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I is claimed. [This

record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 677789-58-1P

RN

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors) 677789-58-1 CAPLUS

CN 1-Propanone, 1-[4-[[3-bromo-5-(2-chlorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]-1-piperidinyl]-3-(phenylsulfonyl)- (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:718536 CAPLUS

DOCUMENT NUMBER: 141:243546

Preparation of N-heterocyclyl-substituted TITLE:

amino-thiazole derivatives as protein kinase

inhibitors

INVENTOR(S): Alegria, Larry Andrew; Chong, Wesley Kwan Mung; Chu,

Shaosong; Duvadie, Rohit Kumar; Li, Lin; Romines,

William Henry, III; Yang, Yi

PATENT ASSIGNEE(S): Pfizer Inc., USA

SOURCE: PCT Int. Appl., 307 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT	ΝΟ.			KIND DATE														
WO	2004	0742	 83		A1 20040902			WO 2004-IB433											
	W: AE, AG, AL,																		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI		
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,		
		ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΗU,	ΙE,	ΙT,	LU,		
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,		
		GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG										
CA	2516	234			A1 20040902				CA 2004-2516234										
EP	1597	256			A1 20051123				EP 2004-709302						20040209 <				
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	ΝL,	SE,	MC,	PT,		
		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
BR	2004	0076	18		A		2006	0221	BR 2004-7618						20040209 <				
	JP 2006518368						T 20060810							20040209 <					
US	US 20050101595						2005	0512		US 2004-783887					2	0040	220	<	
MX	MX 2005PA08878					A 20051005			MX 2005-PA8878						20050819 <				
PRIORIT	PRIORITY APPLN. INFO.:								,	US 2	003-	4488	43P		P 2	0030.	221	<	
									,	WO 2	004-	IB43.	3		W 2	0040	209		
OTHER SO	THER SOURCE(S):						141:	2435	16										

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The title aminothiazole compds. with N-containing cycloalkyl at the 2-amino position [I; N-containing heterocyclyl = (un)substituted N-containing 3-10 membered heterocyclyl; R1 = H, alkyl, alkenyl, alkoxy, etc.; R2 = (un)substituted alkyl, cycloalkyl, alkoxy, aryl, 4-10 membered heterocyclyl] and their pharmaceutically acceptable prodrugs or salts which modulate and/or inhibit the cell proliferation and activity of protein kinases, were prepared Thus, reacting [4-amino-2-(piperidin-4-ylamino)thiazol-5-yl](2,6-difluorophenyl)methanone (preparation given) with 1-methylpiperidine-4-carboxylic acid afforded 65% II which showed Ki of 0.46 μ M against CDK2, Ki of 0.13 μ M against CDK4, and IC50 of >5 μ M in HCT-116 assay for cell growth inhibition. Biol. data were given for over 1100 compds. I. The pharmaceutical compns. comprising the compound I are claimed.

IT 750579-19-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-heterocyclyl-substituted amino-thiazole derivs. as protein kinase inhibitors)

RN 750579-19-2 CAPLUS

CN Ethanone, 1-[4-[[4-amino-5-(2,6-difluorobenzoyl)-2-thiazolyl]amino]-1-piperidinyl]-2-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:467881 CAPLUS

DOCUMENT NUMBER: 141:38631

TITLE: Imidazole derivative, process for producing the same,

and use

INVENTOR(S): Kubo, Keiji; Kuroita, Takanobu; Imaeda, Yasuhiro;

Kawamura, Masaki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 318 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	KIND DATE				•	APPL	_	ION 1		DATE								
WO	2004048363				A1 2004061					WO 2		20031120 <						
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	GE,	
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΙ,	NO,	NZ,	OM,	
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:						MW,								ZW,	AM,	ΑZ,	
		BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
CA	2507	026			A1		2004	0610		CA 2	003-	20031120 <						
AU	2003	2845	96		A1		2004	0618		AU 2	003-	20031120 <						
EP	1564	213			A1		2005	0817		EP 2	003-	20031120 <						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
JP	JP 2004182730						2004	0702	•	JP 2	003-	20031121 <						
US	US 20070004736						2007	0104		US 2006-535268								
RIORIT	ORITY APPLN. INFO.:									JP 2	002-	3389.	39	7	A 2	0021	122	<
										WO 2	003-	JP14	793	Ī	W 2	0031	120	<
מחוום	HED COHDON (C).						MADDAT 141.20021											

OTHER SOURCE(S): MARPAT 141:38631

GΙ

$$A-W-S(O)_{m}-X-Y-NA \longrightarrow Z1-Z2-Z3 \longrightarrow B$$

Imidazole derivs. represented by the formula (I) [wherein R = eachAΒ optionally substituted cyclic hydrocarbon group or heterocyclic group; W = a bond, optionally substituted divalent chain hydrocarbon group; X = optionally substituted divalent hydrocarbon group; Y = CO, S(O), S(O), a bond; ring A = each optionally substituted pyrrolidine ring, piperidine ring, or perhydroazepine ring; Z1, Z3 = each independently a bond or optionally substituted divalent chain hydrocarbon group; Z2 = N(R1), O, S(0), S(0)2, C0, CH(R1), a bond; ring B = an optionally substituted imidazole ring, provided that a substituent of the imidazole ring represented by B may be bonded to R1 to form an optionally substituted ring; m = 0, 1, 2] are prepared These imidazole derivs. are inhibitors of activated blood coagulation factor X (FXa) and useful as anticoagulants for the prevention and/or treatment of myocardial infarction, cerebral infarction, deep venous thrombosis, pulmonary thromboembolism and embolism, obstructive arteriosclerosis, economy class syndromes,

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thromboembolism and embolism during or after surgery, or the second onset
of deep venous thrombosis. Thus, 5-methyl-2-(4-piperidinyl)-1,2-dihydro-
3H-imidazo[1,5-c]imidazol-3-one was condensed with
3-[(6-chloro-2-naphthyl)sulfonyl]propionic acid using HOBt, Et3N, and
1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH2Cl2 to
give 52% 2-[1-[3-[(6-chloro-2-naphthyl)sulfonyl]propanoyl]-4-piperidinyl]-
5-methyl-1,2-dihydro-3H-imidazo[1,5-c]imidazol-3-one (II). II showed IC50
of 5.6 nM for inhibiting FXa. Pharmaceutical formulations, e.g. a
gelatine capsule containing II, were described.
701295-58-1P 701295-60-5P 701295-62-7P
701295-63-8P 701295-65-0P 701295-67-2P
701295-69-4P 701295-70-7P 701295-71-8P
701295-72-9P 701295-73-0P 701295-74-1P
701295-75-2P 701295-76-3P 701295-77-4P
701295-78-5P 701296-00-6P 701296-01-7P
701296-02-8P 701296-03-9P 701296-04-0P
701296-05-1P 701296-06-2P 701296-07-3P
701296-12-0P 701296-13-1P 701296-14-2P
701296-15-3P 701296-16-4P 701296-17-5P
701296-18-6P 701296-19-7P 701296-20-0P
701296-21-1P 701296-22-2P 701296-23-3P
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701297-67-8P 701297-68-9P 701297-71-4P
701297-72-5P 701297-73-6P 701297-74-7P
701297-75-8P 701297-76-9P 701297-77-0P
701297-78-1P 701297-79-2P 701297-80-5P
701297-89-4P 701298-05-7P 701298-08-0P
701298-10-4P 701298-11-5P 701911-96-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of imidazole derivs. as inhibitors of activated blood
   coagulation factor X and antithrombotics)
701295-58-1 CAPLUS
1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(1H-imidazol-1-yl)-
1-piperidinyl]- (CA INDEX NAME)
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RN

CN

701295-60-5 CAPLUS RN

1-Propanone, 3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[4-(1H-imidazol-1-yl)-CN 1-piperidinyl]- (CA INDEX NAME)

RN

701295-62-7 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-methyl-1H-methylCN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

701295-63-8 CAPLUS RN

1-Propanone, 3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[4-(2-methyl-1H-methylCN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

701295-65-0 CAPLUS RN

1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(4-methyl-1H-CN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

701295-67-2 CAPLUS RN

1-Propanone, 3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[4-(4-methyl-1H-methylCN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

701295-69-4 CAPLUS RN

1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2,4-dimethyl-1H-CN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

701295-70-7 CAPLUS RN

1-Propanone, 3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[4-(2,4-dimethyl-1H-1)]CN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

RN

701295-71-8 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-ethyl-1H-CN imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

RN 701295-72-9 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)] sulfonyl]-1-[4-[2-(1-methylethyl)-1H-imidazol-1-yl]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 701295-73-0 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-propyl-1Himidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 701295-74-1 CAPLUS

1-Propanone, 1-[4-(2-butyl-1H-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-2-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-yl)-1-piperidinyl]-3-[(6-chloro-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidazol-1-imidCN naphthalenyl)sulfonyl]- (CA INDEX NAME)

RN

CN 1H-imidazol-1-yl]-1-piperidinyl]- (CA INDEX NAME)

RN 701295-76-3 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[2-(2-hydroxyethyl)-1H-imidazol-1-yl]-1-piperidinyl]- (CA INDEX NAME)

RN 701295-77-4 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(4,5-dimethyl-1H-imidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 701295-78-5 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(2-methyl-1H-benzimidazol-1-yl)-1-piperidinyl]- (CA INDEX NAME)

RN 701296-00-6 CAPLUS

CN Imidazo[1,5-a]pyrazin-8(7H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-3-methyl- (CA INDEX NAME)

RN 701296-01-7 CAPLUS

CN Imidazo[1,5-a]pyrazin-8(7H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1-methyl- (CA INDEX NAME)

RN 701296-02-8 CAPLUS

CN Imidazo[1,5-a]pyrazin-8(7H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1-ethyl- (CA INDEX NAME)

RN 701296-03-9 CAPLUS

CN Imidazo[1,5-a]pyrazin-8(7H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1-ethyl-3-methyl- (CA INDEX NAME)

RN 701296-04-0 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-5-ethyl-1,2-dihydro-

(CA INDEX NAME)

RN 701296-05-1 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-methyl-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 701296-06-2 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(4-bromophenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701296-07-3 CAPLUS

CN 5H-Imidazo[1,5-a]imidazol-5-one, 6-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-6,7-dihydro-2-methyl-(CA INDEX NAME)

RN 701296-12-0 CAPLUS

 $\label{eq:cn_loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl]sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl]sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl]sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl]sulfonyl]-1-loss} \mbox{LH-Imidazole-5-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl]sulfonyl]]-1-loss} \mbox{LH-Imidazole-5-carboxamide,$

oxopropyl]-4-piperidinyl]- (CA INDEX NAME)

RN 701296-13-1 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(1H-imidazol-5ylmethyl)amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

RN

701296-14-2 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[(2-methyl-1H-methCN imidazol-5-yl)methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 701296-15-3 CAPLUS

 $1- Propanone, \ 3- \hbox{\tt [(6-chloro-2-naphthalenyl)sulfonyl]} - 1- \hbox{\tt [4-[[(4-methyl-1H-methyl-$ CN imidazol-5-yl)methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

RN

701296-16-4 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[(1H-imidazol-2ylmethyl)amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 701296-17-5 CAPLUS

CN Acetamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-(1H-imidazol-5-ylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

RN 701296-18-6 CAPLUS

CN Methanesulfonamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-(1H-imidazol-5-ylmethyl)- (CA INDEX NAME)

RN 701296-19-7 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[ethyl[(2-methyl-1H-imidazol-5-yl)methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

RN 701296-20-0 CAPLUS

CN Acetamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-[(2-methyl-1H-imidazol-5-yl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 701296-21-1 CAPLUS

CN Imidazo[1,5-a]pyrazin-6(5H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-7,8-dihydro-3-methyl-(CA INDEX NAME)

RN 701296-22-2 CAPLUS

CN Acetamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-[(4-methyl-1H-imidazol-5-yl)methyl]- (CA INDEX NAME)

RN 701296-23-3 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[ethyl](4-methyl-1H-imidazol-5-yl)methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

RN 701296-24-4 CAPLUS

CN Imidazo[1,5-a]pyrazin-6(5H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-7,8-dihydro- (CA INDEX NAME)

RN 701296-25-5 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(5,6-dihydro-3-methylimidazo[1,5-a]pyrazin-7(8H)-yl)-1-piperidinyl]- (CA INDEX NAME)

RN 701296-26-6 CAPLUS

CN Imidazo[1,5-a]pyrazin-6(5H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-7,8-dihydro-1,5-dimethyl- (CA INDEX NAME)

RN 701296-27-7 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 7-chloro-2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro- (CA INDEX NAME)

$$\begin{array}{c|c}
C1 & O & O \\
N - C - CH_2 - CH_2 - S \\
O & O \\
\end{array}$$

RN 701296-28-8 CAPLUS

CN Imidazo[1,5-a]pyrazin-6(5H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-7,8-dihydro-1-methyl-(CA INDEX NAME)

RN 701296-29-9 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(5,6-dihydro-1-methylimidazo[1,5-a]pyrazin-7(8H)-yl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & &$$

RN 701296-30-2 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-(CA INDEX NAME)

RN 701296-31-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 701296-32-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-

naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-1,7dimethyl- (CA INDEX NAME)

RN 701296-33-5 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5,7-dimethyl- (CA INDEX NAME)

RN 701296-42-6 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-5-ethyl-1,2-dihydro-7-methyl- (CA INDEX NAME)

RN 701296-44-8 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro- (CA INDEX NAME)

RN 701296-46-0 CAPLUS

CN 2-Propenamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-N-(4-methyl-1H-imidazol-5-yl)- (CA INDEX NAME)

RN 701296-99-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-bromo-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-(CA INDEX NAME)

RN 701297-00-9 CAPLUS

CN 1H-Imidazo[1,5-c]imidazole-1,3(2H)-dione, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-5methyl- (CA INDEX NAME)

RN 701297-01-0 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(7-chloro-2H-1-benzopyran-3-y1)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-02-1 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[[(1E)-2-(4-chlorophenyl)ethenyl]sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 701297-03-2 CAPLUS

CN Imidazo[1,5-a]pyrazin-8(5H)-one, 7-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-6,7-dihydro-5-hydroxy-3-methyl- (CA INDEX NAME)

RN 701297-04-3 CAPLUS

CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-7,8-dihydro- (CA INDEX NAME)

RN 701297-05-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(5-chloro-1H-indol-2-yl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-07-6 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-08-7 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[2-[(6-chloro-2-naphthalenyl)sulfonyl]-3-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-09-8 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-10-1 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-(hydroxymethyl)- (CA INDEX NAME)

RN 701297-11-2 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 5-[(acetyloxy)methyl]-2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 701297-12-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-(hydroxymethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-13-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 5-[(benzoyloxy)methyl]-2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

__C1

RN 701297-15-6 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-2-methyl-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 701297-16-7 CAPLUS

CN Carbamic acid, [1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 701297-17-8 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[2-amino-3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 701297-18-9 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-3,4-dihydro-2(1H)-isoquinolinyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-(CA INDEX NAME)

RN 701297-19-0 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[4-[[(1E)-2-(4-chlorophenyl)ethenyl]sulfonyl]-1-oxobutyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 701297-21-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[4-[(6-chloro-2-naphthalenyl)sulfonyl]-3-methyl-1-oxobutyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-23-6 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[[2-(4-chlorophenyl)ethyl]sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-25-8 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-26-9 CAPLUS

CN Acetamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-2,2,2-trifluoro- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-27-0 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-2-amino-3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 701297-28-1 CAPLUS

CN Acetamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-29-2 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-

oxoethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-30-5 CAPLUS

CN Methanesulfonamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-31-6 CAPLUS

CN Benzenesulfonamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-4-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-32-7 CAPLUS

CN Urea, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-N'-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-33-8 CAPLUS

CN Urea, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]- (CA INDEX NAME)

RN 701297-34-9 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-35-0 CAPLUS

CN Acetamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-2-methoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-36-1 CAPLUS

CN Carbamic acid, [(1R)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 701297-37-2 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxo-2-(phenylamino)propyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-38-3 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-40-7 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)

RN 701297-41-8 CAPLUS

CN 4-Pyridinecarboxamide, N-[(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-42-9 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-oxoethyl]-, 2-(phenylmethoxy)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-43-0 CAPLUS

CN Carbamic acid, [(1S)-1-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-2-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-2-

oxoethyl]-, 2-chloroethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-44-1 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxo-2-(2-oxo-3-oxazolidinyl)propyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-45-2 CAPLUS

CN Carbamic acid, [(2S)-2-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-3-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-46-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(3S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-3-(methylamino)-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl-, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 701297-47-4 CAPLUS

CN Carbamic acid, cyclohexyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-48-5 CAPLUS

CN 4-Piperidinecarboxylic acid, 1-acetyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-49-6 CAPLUS

CN 1-Pyrrolidinepropanoic acid, 2-oxo-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-50-9 CAPLUS

CN 1-Pyrrolidineacetic acid, 2-oxo-, [2-[1-[(2S)-3-[(6-chloro-2-

naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-51-0 CAPLUS

CN Carbamic acid, [2-[[(6-chloro-2-naphthalenyl)sulfonyl]methyl]-3-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-3-oxopropyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 701297-52-1 CAPLUS

CN 1-Piperidinepropanoic acid, 2-oxo-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-B

RN 701297-53-2 CAPLUS

CN 1-Piperidineacetic acid, 2-oxo-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-54-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2R)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-55-4 CAPLUS

CN Carbamic acid, ethyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-56-5 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-5-[(dimethylamino)methyl]-1,2-dihydro- (CA INDEX NAME)

RN 701297-57-6 CAPLUS

CN Carbamic acid, dimethyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-58-7 CAPLUS

CN β -Alanine, N-acetyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-B

RN 701297-59-8 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-5-(fluoromethyl)-1,2-dihydro- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-60-1 CAPLUS

CN L-Valine, N-acetyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-B

RN 701297-61-2 CAPLUS

CN Carbonic acid, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-62-3 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-(hydroxymethyl)-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-methyl- (CA INDEX NAME)

RN 701297-63-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-5-(difluoromethyl)-1,2-dihydro- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-64-5 CAPLUS

CN Acetamide, N-[[2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-65-6 CAPLUS

CN Methanesulfonamide, N-[[2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl]-N-methyl- (CA INDEX NAME)

RN 701297-66-7 CAPLUS

CN Butanoic acid, 4-(acetylamino)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-67-8 CAPLUS

CN Pentanoic acid, 5-(benzoylamino)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-B

RN 701297-68-9 CAPLUS

CN β -Alanine, N-(1-oxobutyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-71-4 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5,7-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-72-5 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-1,2-dihydro-5-(methoxymethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-73-6 CAPLUS

CN β -Alanine, N-(1-oxohexyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Me (CH₂) 4
$$\stackrel{H}{\sim}$$
 N $\stackrel{O}{\sim}$ O

RN 701297-74-7 CAPLUS

CN β -Alanine, N-ethyl-N-(1-oxopropyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-75-8 CAPLUS

CN β -Alanine, N-ethyl-N-(1-oxobutyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-B

RN 701297-76-9 CAPLUS

CN β -Alanine, N-acetyl-N-methyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-77-0 CAPLUS

CN β -Alanine, N-acetyl-N-ethyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-

piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-78-1 CAPLUS

CN β -Alanine, N-methyl-N-(1-oxobutyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 701297-79-2 CAPLUS CN β -Alanine, N-methyl-N-(1-oxohexyl)-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 701297-80-5 CAPLUS

CN β -Alanine, N-acetyl-N-propyl-, [2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-2,3-dihydro-3-oxo-1H-imidazo[1,5-c]imidazol-5-yl]methyl ester (CA INDEX NAME)

PAGE 1-A

RN 701297-89-4 CAPLUS

CN Imidazo[1,2-a]pyridine-3-carboxamide, N-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-1-oxopropyl]5,6,7,8-tetrahydro- (CA INDEX NAME)

RN

701298-05-7 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(3,4-CN dihydropyrido[4',3':4,5]imidazo[1,2-a]pyridin-2(1H)-yl)-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 701298-08-0 CAPLUS

CN 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-(3,4,6,7,8,9-1)]hexahydropyrido[4',3':4,5]imidazo[1,2-a]pyridin-2(1H)-yl)-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 701298-10-4 CAPLUS

1-Propanone, 3-[(5-chloro-1H-indol-2-yl)sulfonyl]-1-[4-(3,4,6,7,8,9-CN hexahydropyrido[4',3':4,5]imidazo[1,2-a]pyridin-2(1H)-yl)-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

● 2 HC1

RN 701298-11-5 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2naphthalenyl)sulfonyl]-1-oxopropyl]-4-methyl-4-piperidinyl]-1,2-dihydro-5methyl- (CA INDEX NAME)

701911-96-8 CAPLUS RN

5H-Imidazo[1,5-a]imidazol-5-one, 6-[1-[3-[(6-chloro-2-CN naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-6,7-dihydro- (CA INDEX NAME)

701298-60-4P 701298-62-6P 701298-63-7P ΙT

701298-64-8P 701298-82-0P 701299-44-7P

701299-62-9P 701299-64-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imidazole derivs. as inhibitors of activated blood coagulation factor X and antithrombotics)

RN

701298-60-4 CAPLUS 1-Propanone, 1-(4-amino-1-piperidiny1)-3-[(6-chloro-2-CN naphthalenyl)sulfonyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \circ & \circ \\ & \circ \\$$

701298-62-6 CAPLUS RN

1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[[1-CN (triphenylmethyl)-1H-imidazol-4-yl]methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

701298-63-7 CAPLUS RN

1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[[2-methyl-1-CN (triphenylmethyl)-1H-imidazol-4-yl]methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

701298-64-8 CAPLUS RN

1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[[4-methyl-1-CN (triphenylmethyl)-1H-imidazol-5-yl]methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\$$

RN

701298-82-0 CAPLUS 1-Propanone, 3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[4-[[(2-ethyl-4-CN methyl-1H-imidazol-5-yl)methyl]amino]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 701299-44-7 CAPLUS

CN 1H-Indole-1-carboxylic acid, 5-chloro-2-[[3-[4-(5-methyl-3-oxo-1H-imidazo[1,5-c]imidazol-2(3H)-yl)-1-piperidinyl]-3-oxopropyl]sulfonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 701299-62-9 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[3-[(6-chloro-2-naphthalenyl)sulfonyl]-1-oxopropyl]-4-piperidinyl]-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro- (CA INDEX NAME)

RN 701299-64-1 CAPLUS

CN 3H-Imidazo[1,5-c]imidazol-3-one, 2-[1-[(2S)-3-[(6-chloro-2-naphthalenyl)sulfonyl]-2-hydroxy-1-oxopropyl]-4-piperidinyl]-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro- (CA INDEX NAME)

PAGE 1-B

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:265847 CAPLUS

DOCUMENT NUMBER: 140:321370

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent

kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor Moopil; Mallams, Alan; Alvarez, Carmen S.; Keertikar, Kartik M.; Rivera, Jocelyn; Chan, Tin-yau; Madison, Vincent; Fischmann, Thierry O.; Dillard, Lawrence W.; Tran, Vinh D.; He, Zhen Min; James, Ray Anthony; Park, Haengsoon; Paradkar, Vidyadhar M.; Hobbs, Douglas

Walsh

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 609 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.	DATE					
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WO 2004022	561		A1		20040318		1	WO 2003-XA27555					20030903 <				
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CN 1735614	A	20060215	CN 2003-824997		20030903 <
CN 100376580	С	20080326			
CN 1880317	A	20061220	CN 2006-10101322		20030903 <
ZA 2005001855	A	20060329	ZA 2005-1855		20060117 <
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			US 2002-421959P	P	20021029 <
			CN 2003-824997	А3	20030903 <
GI					

$$\mathbb{R}^3$$
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Ι

AB The title compds. [I R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020 μM and 0.029 μM against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I is claimed. This is a

Part
II of I-III series.

IT 677789-58-1P

RN

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors) $677789 - 58 - 1 \;\; \text{CAPLUS}$

CN 1-Propanone, 1-[4-[[3-bromo-5-(2-chlorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]-1-piperidinyl]-3-(phenylsulfonyl)- (CA INDEX NAME)

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:10480 CAPLUS

136:85818 DOCUMENT NUMBER:

TITLE: Preparation of pyrrolo[2,3-d]pyrimidines as

immunosuppressive agents

Blumenkopf, Todd Andrew; Flanagan, Mark Edward; Munchhof, Michael John INVENTOR(S):

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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							2002	20103 WO 2001-IB975					20010605 <					
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PT	1294724	T	20060731	PT 2001-934243		20010605 <
ES	2257410	Т3	20060801	ES 2001-934243		20010605 <
EP	1686130	A1	20060802	EP 2006-7969		20010605 <
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CN	100351253	C	20071128	CN 2001-811792		20010605 <
TW	243820	В	20051121	TW 2001-90115016		20010620 <
US	20020068746	A1	20020606	US 2001-891028		20010625 <
US	6696567	В2	20040224			
IN	2002DN01075	А	20050128	IN 2002-DN1075		20021030 <
BG	107236	А	20030930	BG 2002-107236		20021031 <
NO	2002006030	А	20021216	NO 2002-6030		20021216 <
NO	324934	В1	20080107			
MX	2003PA00068	А	20030925	MX 2003-PA68		20021219 <
ZA	2002010275	А	20031219	ZA 2002-10275		20021219 <
US	20030220353	A1	20031127	US 2003-463724		20030616 <
US	6962993	В2	20051108			
HK	1054930	A1	20080606	HK 2003-107143		20031003 <
US	20050197349	A1	20050908	US 2005-112307		20050421 <
US	7192963	В2	20070320			
US	20070161666	A1	20070712	US 2007-710164		20070222 <
PRIORITY	APPLN. INFO.:			US 2000-214287P	P	20000626 <
				EP 2001-934243	А	3 20010605 <
				WO 2001-IB975	M	20010605 <
				US 2001-891028	A	1 20010625 <
				US 2003-463724	A	1 20030616 <
				US 2005-112307	A	3 20050421

 R^1 R^2 R^3 R^3 R^3

OTHER SOURCE(S):

GΙ

RN

MARPAT 136:85818

AB The title compds. [I; R1 = NR4(CH2)yR5 (wherein y = 0-2; R4 = H, alkyl, alkylsulfonyl, etc.; R5 = substituted heterocycloalkyl); R2, R3 = H, NH2, halo, etc.], useful as inhibitors of protein kinases, such as the enzyme Janus Kinase 3 (no data given), were prepared, e.g., a multi-step synthesis of II was given.

IT 384337-72-8P 384337-79-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrrolo[2,3-d]pyrimidines as immunosuppressive agents) 384337-72-8 CAPLUS

CN Ethanone, 1-[4-methyl-3-(methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]-2-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

RN 384337-79-5 CAPLUS

CN Ethanone, 1-[4-methyl-3-(methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]-2-(3-thiazolidinylsulfonyl)- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:762989 CAPLUS

DOCUMENT NUMBER: 135:318419

TITLE: Synthesis of substituted bipiperidines and their use

as H1 antagonists

INVENTOR(S): Lawrence, Louise; Rigby, Aaron; Sanganee, Hitesh;

Springthorpe, Brian

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 160 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077101	A1	20011018	WO 2001-SE751	20010405 <
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HR, HU,	ID, IL, IN	, IS, JP,	KE, KG, KP, KR, KZ,	LC, LK, LR, LS,
LT, LU,	LV, MA, MD	, MG, MK,	MN, MW, MX, MZ, NO,	NZ, PL, PT, RO,
RU, SD,	SE, SG, SI	, SK, SL,	TJ, TM, TR, TT, TZ,	UA, UG, US, UZ,
VN, YU,	ZA, ZW			

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        CA 2403012
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        EP 1274701
                                      A1
                                              20030115 EP 2001-920053
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       EP 1274701
                                     B1 20050629
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                    IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
        BR 2001009922 A 20030218 BR 2001-9922
                                                                                                      20010405 <--
                                                                CN 2001-810683
       CN 1433411 A 20030730 CN 2001-810683 CN 1244576 C 20060308 JP 2003530393 T 20031014 JP 2001-575574 NZ 521543 A 20041029 NZ 2001-521543 EP 1493743 A1 20050105 EP 2004-20599 EP 1493743 B1 20080903
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       AT 298748 T
CN 1660839 A
                                            20050715
                                                               AT 2001-920053
                                                                                                      20010405 <--
                                               20050831
                                                               CN 2004-10102245
                                                                                                      20010405 <--
       AU 2001246997 B2 20070329

AT 407131 T 20080915

US 20020077337 A1 20020620

US 6525070 B2 20030225

ZA 2002007700 A 20040102
                                                               AU 2001-246997
AT 2004-20599
US 2001-827488
                                                                                                    20010405 <--
                                                                                                    20010405 <--
                                                                                                      20010406 <--
       ZA 2002007700 A 20040102

NO 2002004774 A 20021129

MX 2002PA09885 A 20030327

US 20040006080 A1 20040108

US 6903115 B2 20050607
                                                                ZA 2002-7700
NO 2002-4774
                                                                                                     20020925 <--
                                                                                                      20021003 <--
                                                                MX 2002-PA9885
US 2003-341027
                                                                                                      20021007 <--
                                                                                                     20030113 <--
US 20040014783 A1 20040122

US 7238811 B2 20070703

HK 1051193 A1 20051028

US 20050171092 A1 20050804

US 7179922 B2 20070220

US 20070179297 A1 20070802

PRIORITY APPLN. INFO.:
                                                                 US 2003-436582
                                                                                                     20030513 <--
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                                                                                                      20030514 <--
                                                                 US 2005-76773
                                                                                                      20050310 <--
                                                                  US 2007-732411 20070403 <--
GB 2000-8626 A 20000408 <--
GB 2000-19111 A 20000803 <--
SE 2000-3664 A 20001011 <--
CN 2001-810683 A3 20010405 <--
EP 2001-920053 A3 20010405 <--
WO 2001-SE751 W 20010405 <--
US 2001-827488 A3 20010406 <--
US 2003-341027 A1 20030113 <--
US 2003-436582 A3 20030513 <--
                                                                 US 2007-732411
OTHER SOURCE(S): MARPAT 135:318419
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GT

AB Title compds. I [q, s, t = 0 - 1; n, r = 0 - 5; m, p = 0 - 2; X = CH, C(O), O, S, S(O), S(O), N-; provided that when m and p are both 1 then X is not CH; Y = NHR2, OH; T = C(O), C(S), S(O), CH2; R1 = H, alkyl, aryl, heterocyclyl; R2, R47 = H, alkyl, aryl-alkyl, CO-alkyl; R3 = alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, thioaryl, thioheterocyclyl] were prepared Examples include: data for over 600 compds., 4 solid oral dosage and 1 parenteral (general) formulations, a bioassay for Ca2+ flux, human eosinophil chemotaxis and H1 antagonism. E.g., 4-(3,4-dichlorophenoxy)piperidine was alkylated with 1-(tert-butoxycarbonyl)-4-piperidone (1,2-dichloroethane, NaBH(OAc)3, HOAc, 18 h, room temperature) to give an intermediate [1,4']bipiperidine. This intermediate was deprotected (DCM, TFA, 4 h, room temperature) and the resulting

II

bipiperidine condensed with 3-methanesulfonylbenzoic acid (THF, PYBROP, (i-Pr)2NEt, 18 h, room temperature) to give example compound II isolated as the acetate salt. I are used in the treatment of a chemokine (such as CCR3) or H1 mediated disease state.

IT 367498-05-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of substituted bipiperidines and use as H1 antagonists)

RN 367498-05-3 CAPLUS

CN 1-Propanone, 1-[4-(3,4-dichlorophenoxy)[1,4'-bipiperidin]-1'-y1]-2-[[5-(trifluoromethy1)-2-pyridiny1]sulfony1]- (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:453019 CAPLUS

DOCUMENT NUMBER: 135:46106

TITLE: 4-Aminopiperidine derivatives, processes for their

preparation, pharmaceutical compositions, and their

use as medicines, specifically as somatostatin

receptor ligands

INVENTOR(S): Thurieau, Christophe; Gonzalez, Jerome; Moinet,

Christophe

PATENT ASSIGNEE(S): Societe de Conseils de Recherches et d'Applications

Scientifiques (S.C.R.A.S.), Fr.

SOURCE: PCT Int. Appl., 193 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT 1	NO.			KINI		DATE			APPL	ICAT	ION	NO.	DATE				
WO	2001	0441	 91							 WO 2	000-	 FR34	 97		2	0001	213	<
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		LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK	, SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
		YU,	ZA,	ZW	•		·	·	•			·	•	•	·			
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG			
FR	2802	206			A1		2001	0615		FR 1	999-	1572	4		1	9991:	214	
FR	2802				В1		2005	0422										
CA	2394	086			A1		2001	0621		CA 2	000 -	2394	086		2	0001	213	<
	1286	966			A1		2003	0305		EP 2	000 -	9934	05		2	0001	213	<
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AU	7793	41			В2		2005	0120		AU 2	001-	2856	0		2	0001		
RU	2266.	282			C2		2005	1220		RU 2	002-	1187	05		2	0001	213	<
AT	4013	08			Т		2008	0815		AT 2	000-	9934	05		2	0001		
US	2004	0006	089		Al		2004	0108		US 2	002-	1309	24		2	0020	523	<
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	2005		796		A1		2005			US 2	005-	1222	93		2	0050	504	<
	7393				В2		2008	-		^	000		4.0			0000		
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											000-					0001		
											002-					0020		
		(0)					105	4640		KR 2	002-	/0/5	U6	-	A3 2	0020	612	<
HED CO	JUDGE.	151.			MADI	$\supset \Delta \cdot \Gamma$	135.	716 T ()	h									

OTHER SOURCE(S): MARPAT 135:46106

GΙ

AΒ The invention concerns novel 4-aminopiperidine derivs. I [R1 = alkyl, alkenyl, alkynyl, (CH2)mYZ1, (CH2)mZ2, 1-benzylpiperidin-4-yl, 2-naphthylcarbamoyl, 4-benzylpiperazin-1-yl, 2-acetamidoethyl; Z1 = alkyl or (un) substituted aryl; Z2 = cyano, cyclohexenyl, bis-Ph, cycloalkyl, (un) substituted heterocycloalkyl, aryl, heteroaryl, etc.; R2 = C(Y)NHX1, C(0)X2, SO2X3; R3 = H, (un)substituted alkyl, alkenyl, alkynyl, aralkyl, C(Y)NHX1, (CH2)nC(O)X2, SO2X3, etc.; X1 = alky1, alkeny1, alkyny1, ary1, aralkyl, etc.; X2 = wide variety of groups; X3 = alkyl, alkenyl, phenylalkenyl, CF3, (un)substituted (hetero)aryl or -aralkyl; Y = 0, S; n = 0-4; m = 1-6]. Also disclosed are methods for their preparation by parallel synthesis processes in liquid and solid phase. I have good affinity for certain sub-types of somatostatin receptors, and are particularly useful for treating pathol. conditions or diseases wherein one more somatostatin receptor sub-types are involved. Claims specifically mention acromegaly, pituitary adenoma, or endocrine gastroenteropanceatic tumors in carcinoid syndrome. A table of 778 compds. I is given, and several syntheses are described in detail. For instance, N-BOC-4-piperidone underwent reductive amination with 3,3-diphenylpropylamine and NaBH(OAc)3, followed by reaction with 3-trifluoromethylphenyl isocyanate, removal of the BOC group with CF3CO2H, and reaction with Ph isocyanate, to give title compound II. Some compds. I had sub-micromolar Ki for at least one of five tested somatostatin receptor subtypes (no data).

IT 344783-02-4P 344783-21-7P 344783-40-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aminopiperidine derivs. as somatostatin receptor ligands)

RN 344783-02-4 CAPLUS

CN Glycine, N-[[[1-[1-oxo-3-(phenylsulfonyl)propyl]-4-piperidinyl][1-(phenylmethyl)-4-piperidinyl]amino]carbonyl]-, ethyl ester (CA INDEX NAME)

RN 344783-21-7 CAPLUS

CN Urea, N'-butyl-N-[1-[1-oxo-3-(phenylsulfonyl)propyl]-4-piperidinyl]-N-[1-(phenylmethyl)-4-piperidinyl]- (CA INDEX NAME)

RN 344783-40-0 CAPLUS

CN Thiourea, N'-[2-(4-morpholinyl)ethyl]-N-[1-[1-oxo-3-(phenylsulfonyl)propyl]-4-piperidinyl]-N-[1-(phenylmethyl)-4-piperidinyl]-(CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:466913 CAPLUS

DOCUMENT NUMBER: 125:142726

ORIGINAL REFERENCE NO.: 125:26717a,26720a

TITLE: Muscarine antagonists

INVENTOR(S): Thompson, Wayne J.; Sugrue, Michael F.; Ransom,

Richard W.; Mallorga, Pierre J.; Bell, Ian M.; Smith,

Anthony M.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA PCT Int. Appl., 125 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIN	D 1	DATE		APPLICATION NO.			D.	DATE					
WC	9613	262			A1		 1996	0509							1	 9951	024 <	
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		RU,	SG,	SI,	SK,	ΤJ,	TM,	TT,	UA,	US,	UZ							
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	
		ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	
		ΝE,	SN,	TD,	ΤG													
US	5574	044			А		1996	1112		US 1	994-	3297	57		1	9941	027	
US	5691	.323			А		1997	1125		US 1	995-	4401	53		1	9950	512	
CA	. 2200	468			A1		1996	0509		CA 1	995-	2200	468		1	9951	024 <	
AU	9539	674			A		1996	0523		AU 1	995-	3967	4		1	9951	024 <	
AU	7011	.27			В2		1999	0121										
EP	7869	97			A1		1997	0806		EP 1	995-	9376	15		1	9951	024 <	
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JP	2002	5150	8 0		${ m T}$		2002	0521		JP 1	996-	5146	91		1	9951	024 <	
PRIORIT	Y APP	LN.	INFO	.:									-				027 <	
											995-						512 <	
										WO 1	995-	US13	710	1	W 1	9951	024 <	

CASREACT 125:142726; MARPAT 125:142726 OTHER SOURCE(S):

Compds., 1,3-dihydro-1-{1-[piperidin-4-yl]piperidin-4-yl}-2H-benzimidazol-2-ones and 1,3-dihydro-1-{4-amino-1-cyclohexyl}-2H-benzimidazol-2-ones and derivs. thereof, their preparation, method of use and pharmaceutical compns. are described. These compds. are endowed with antimuscarinic activity and are useful in the treatment and/or prevention of myopia (commonly known as nearsightedness).

ΙT 179323-34-3P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 179323-34-3 CAPLUS

2H-Benzimidazol-2-one, 1,3-dihydro-1-[1'-[2-(4-CN pyridinylsulfonyl)acetyl][1,4'-bipiperidin]-4-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O & \\ \hline \\ N & \\ \end{array} \\ \begin{array}{c} O & O \\ \hline \\ O & \\ \end{array} \\ \begin{array}{c} O & O \\ \hline \\ \end{array} \\ \begin{array}{c} O$$

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

FULL ESTIMATED COST	ENTRY 69.44	SESSION 249.85
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.60	-9.60

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